### **Vermont Mental Health Performance Indicator Project**

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

#### MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project

Advisory Group and Interested Parties

FROM: John Pandiani and Monica Simon

DATE: May 9, 2003

RE: Change in Test Participation for IEP Students

Vermont recently completed its fifth annual round of statewide New Standards Exams on the 4th, 8th and 10th grade levels. This week's PIP examines rates of participation in the Mathematics Skills Assessment in order to determine if there were any changes in the levels of participation for young people with an Individualized Educational Plan (IEP) between the first two years of standardized testing and the second two years of standardized testing. As in our previous analyses, test participation is defined by completion of the specified test on grade level or one year behind grade level. An increase in participation rates will be interpreted as an indication of increased participation in the educational mainstream. A decrease in participation rates will be interpreted as an indication of decreased participation in the educational mainstream.

Participation rates are examined for all young people with an IEP, and for young people in four distinct disability categories. These disability categories include: Emotional/Behavioral Disability (EBD), Specific Learning Disability (SLD), Speech/Language Impaired (SLI), and Learning Impaired (LI). A brief description of special education eligibility criteria in Vermont and descriptions of these disabilities are attached. Between 1998-1999 and 2000-2001, the overall special education caseload increased slightly (3% for 4th grade, and 6% for 8th grade and 10th grade). There were substantial increases, however, in the number of EBD students at the fourth grade level (+23%), and in SLI students at the 10th grade level (+22%).

The average proportion of all students with an IEP who participated in the Mathematics Skills Assessment at the 4th grade level increased from 48% in 1998-1999 to 55% during 2000-2001. The average proportion of all students with an IEP who participated in the Mathematics Skills Assessment at the 8th grade level increased at a similar rate (from 45% to 53%). Both of these increases are statistically significant, but the small increase in participation at the 10th grade level (36% to 39%) was not statistically significant. The greatest increase in participation rate was among 4th grade EBD students (from 40% to 64%), followed by SLD students in the 8th grade (51% to 64%), and SLD students in the 10th grade (from 40% to 51%).

These results indicate there were small increases in one aspect of participation in the educational mainstream for students on Individualized Educational Plans in Vermont during the

first four years after statewide standardized testing was initiated. Continued monitoring of levels of participation in standardized testing could provide an indicator of change in the inclusiveness of the testing process as well as change in the degree to which special education students participate in the educational mainstream.

We will appreciate your questions, comments, and suggestions for future analysis of these data to pip@ddmhs.state.vt.us or call 802-241-2638.

### **Eligibility for Special Education**

A child/student is eligible for special education if:

- (1) He or she has a disability that meets criteria for one of 12 disabilities outlined in Vermont regulations.
- (2) The disability results in an adverse effect on the child's educational performance in one or more of the basic skill areas.
- (3) The student needs special education services to benefit from his/her educational program and this support cannot be provided through the educational support system, standard instructional conditions, or supplementary aids and services provided in the school.

#### **Selected Disability Definitions**

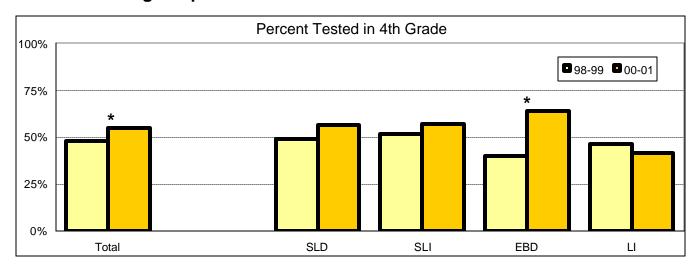
Learning Impaired (LI) – delay or impairment in learning that causes a student's performance on test of intellectual ability to fall at or below 1.5 standard deviations below the mean (IQ of 78 or less) AND the student has concurrent deficits in adaptive behavior.

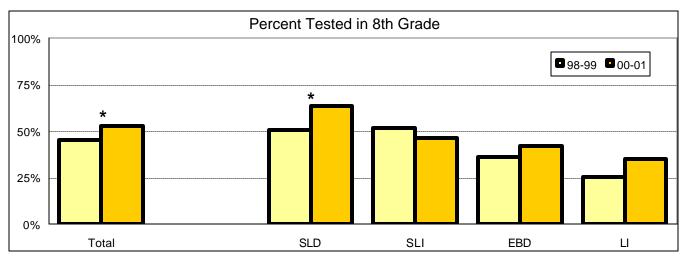
Specific Learning Disability (SLD) – disability of a perceptual, conceptual, or coordinative nature demonstrated by a severe discrepancy between ability and achievement in one or more basic skill areas -- oral or written expression, reading or listening comprehension, reading skills, math calculation or math reasoning. (Severe discrepancy must be greater than 1.5 S.D. below expected achievement for given ability.)

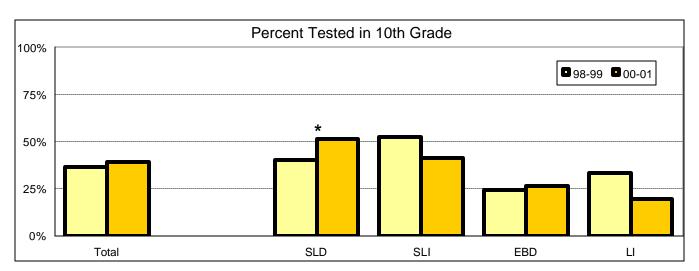
Speech/Language Impaired (SLI) – significant deficits in listening comprehension or oral expression, evaluated by licensed speech language pathologist.

Emotional/Behavioral Disability (EBD) – a condition, including schizophrenia, exhibiting one or more of the following characteristics over a long period of time and to a marked degree: Inability to learn that cannot be explained by intellectual, sensory or health factors, inability to build or maintain satisfactory interpersonal relationships with peers and teachers, inappropriate types of behaviors or feelings under normal circumstances, general pervasive mood of unhappiness or depression, or tendency to develop physical symptoms or fears associated with personal or school problems.

## Participation in Statewide Mathematics Skills Assessment for Young People with an Individualized Education Plan: 1998-2001







Rates represent a 2 year average.

Participation includes young people who completed the New Standards Reference Exam. Analysis is based on data provided by the Department of Education. SLD - Specific Learning Disability, SLI - Speech/Language Impaired, EBD - Emotional/Behavioral Disability, U - Learning Impaired. Because these data sets do not share unique person identifers, Probabilistic Population Estimation was used to provide unduplicated counts of individuals shared across data sets (with 95% confidence intervals).

# Participation in Statewide Mathematics Skills Assessment for Young People with an Individualized Education Plan: 1998-2001

		_	Individualized Education Plan				
			Number Served		Percent Tested		<u></u>
		_	1998 - 1999*	2000 - 2001*	1998 - 1999*	2000 - 2001*	p-value
4th Grade	Total		1,200 ± 9	1,234 ± 10	48% ± 4%	55% ± 5%	0.03
	Specific Learning Disability -	SLD	551 + 8	510 + 7	49% + 6%	56% + 8%	ns
	Speech/Language Impaired -	SLI	$237 \pm 4$	$259 \pm 4$	51% ± 8%	57% ± 8%	ns
	Emotional/Behavioral Disability -	EBD	119 ± 2	146 ± 3	40% ± 19%	64% ± 13%	0.04
	Learning Impaired -	LI	127 ± 2	123 ± 2	46% ± 11%	<b>41%</b> ± 11%	ns
8th Grade							
	Total		$1,300 \pm 10$	$1,375 \pm 11$	45% ± 4%	53% ± 4%	0.007
	Specific Learning Disability -	SLD	604 ± 9	606 ± 9	51% ± 6%	64% <u>+</u> 5%	0.001
	Speech/Language Impaired -	SLI	160 ± 3	171 ± 3	$52\% \pm 10\%$	47% ± 14%	ns
	Emotional/Behavioral Disability -	EBD	241 ± 4	$255 \pm 4$	$36\% \pm 10\%$	42% ± 12%	ns
	Learning Impaired -	LI	153 ± 3	139 ± 2	26% ± 15%	35% ± 11%	ns
10th Grade	<del>)</del>						
	Total		1,154 ± 9	1,226 ± 10	36% ± 4%	39% ± 5%	ns
	Specific Learning Disability -	SLD	514 + 7	510 + 8	40% + 5%	51% + 6%	0.004
	Speech/Language Impaired -	SLI	113 + 2	138 + 2	52% + 11%	41% + 16%	ns
	Emotional/Behavioral Disability -	EBD	263 + 4	294 + 5	24% + 9%	27% + 10%	ns
	Learning Impaired -	LI	143 ± 2	128 ± 2	33% ± 9%	19% ± 17%	ns

<sup>\*</sup>Represents a 2 year average.

Participation includes young people who completed the New Standards Reference Exam on grade level or one year behind. Analysis is based on data provided by The Department of Education. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation was used to provide unduplicated counts of individuals shared across data sets (with 95% confidence intervals).